mrg®

reliability. experience. integrity.®

Ready to begin developing, assessing, or improving a reliability program?

MRG's Catapult® EAM System Launcher helps build and sustain reliability strategies on any scale with ease and efficiency.

Catapult® enhances the full scope of reliability program development and management activities, from the collection of asset and inventory data to the optimization of maintenance strategies across an entire fleet of plants.

Corporate Reliability Program Support

Catapult® is designed to equip corporate reliability teams with tools to support reliability and maintenance personnel throughout their organizations. Catapult® backed reliability and CMMS/EAM implementations are scalable, efficient, and include a path to optimization.

Enterprise Scalability

An enterprise approach to asset management drives economies of scale in program implementation and execution. By imparting a consistent taxonomy, Catapult® provides data standardization and supports repeatability at all levels of process design and system specification.

Business-Centered Reliability Tools

Identifying the most efficient mix of PMs and PdM tasks requires a comprehensive review of failure modes against the costs of potential controls, taking into account differences in labor costs, craft skills, parts and asset downtime. Catapult® catalogs assets and spares, prioritizes reliability strategy development through criticality analysis and documents the most cost-effective combination of controls for all failure modes.

Once a reliability strategy template has been built, Catapult® makes it available to be adapted and applied to all similar assets across the fleet, driving more rapid implementation and standardization on best practices.

Reliability Optimization

Optimization can be achieved through a virtuous cycle of setting, measuring and improving reliability strategy standards. Strategy performance is measured across the population and Catapult® publishes strategy improvements for use across the fleet.

MRG's Catapult® enables a CMMS to:

- Maintain an asset and inventory taxonomy
- Design condition-based maintenance strategies
- Allow what-ifs in Reliability Strategy Development
- Enable Reliability Strategy Optimization through continuous improvement

reliability. experience. integrity.®

Maintenance Data Standardization:
Taxonomies and Libraries

Catapult® EAM System Launcher comes preloaded with MRG's taxonomy and can be populated with additional value added content. Our taxonomy includes class and subclass naming conventions for equipment and parts, spec sheets for equipment, standard attributes for parts, and our PdM Baseline®. MRG's five million part item library, FMEA templates and failure hierarchies can be added to the suite, depending on your data needs.

The PdM Baseline is an essential reliability strategy reference source that establishes the 100% PdM coverage benchmark for your facility, enabling easy comparison to MRG's proprietary PdM and performance quartiles. It also includes startup and average ongoing PdM costs, simplifying the comparison of alternative failure mitigation strategies.

Foundational Data Maintenance

Companies face the challenge of having several stakeholders involved in establishing foundational data and then maintaining it; there is no process to govern management-of-change and no system to support it. Catapult® is designed to provide a platform that structures all "Add", "Modify" and "Delete" decisions affecting your asset and inventory data within your CMMS, EAM or ERP.

Inventory

The Inventory Module in Catapult® is designed to manipulate and leverage inventory data standards. Our 4,500 item class-subclass dictionary uses industry standard naming structures, including catalog frameworks like UN/SPSC and ThomasRegister®, standards or corporate taxonomies. With more than five million already standardized MRO part records, MRG's libraries accelerate standardization while improving quality. The Inventory Module links directly to the Asset Registry through BOMs, supporting management-of-change through the store room, ensuring that you never stock unnecessary parts again.

Asset

The Asset Module in Catapult® is designed to establish and leverage Asset data standards, accelerating the development of accurate master equipment lists and cementing management-of-change procedures.

It also eases creation of PMs, PdMs and BOMs. Asset Module templates are pre-configured with equipment class structures, manufacturer name tables, and attributes, ensuring the highest quality data in the least amount of time.

Management Resources Group, Inc.   27 Glen Road, 3rd Floor, Sandy Hook, CT   203.264.0500   www.mrgsolutions.com

reliability. experience. integrity.®

A Systematic Approach to Reliability

Catapult® is a stand alone system that augments any CMMS or EAM, enabling optimization of Reliability strategies. Using MRG's standard dictionary, Catapult® rapidly organizes and builds foundational data and manages additions, modifications or deletions to an equipment list or inventory catalog. Catapult® then builds business-based reliability strategies for an individual asset or efficiently aligns resources to failure modes on any scale--from asset to enterprise.
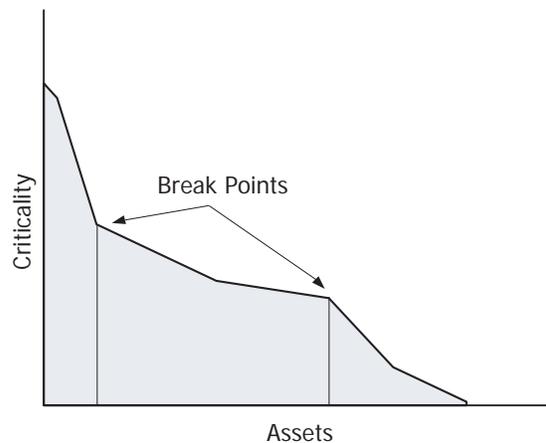
Reliability Strategy

Catapult® provides an independent modeling environment for identifying, publishing and refining efficient reliability strategies. It also creates a platform for launching and maintaining reliability standards such as naming conventions, spec sheets, failure modes and effects analyses, maintenance procedures, maintenance methods, schedules and bills of materials. Knowledge resources stored centrally in Catapult® can be published to a CMMS at your plant or anywhere across your enterprise.

As a modeling environment, Catapult® enables cross-sectional analysis of failure modes arranged by criticality, by like system, or by location, assuring comprehensive coverage of your failure risks. In addition, Catapult® provides the ability to compare the cost impact of maintenance strategy alternatives, assuring that all risks are covered at the lowest possible cost. Finally, Catapult® establishes a rich scheduling environment culminating in the Maintenance Optimization Matrix (MOM) report, that provides a concise view of your resource allocation across a chosen scheduling horizon.

Understanding Equipment Criticality

Catapult® includes a tool that enables the alignment of your maintenance resources to your most critical assets and failure modes. The Criticality Ranking Tool is essential to efficient reliability program development. The tool allows you to establish and prioritize criteria (e.g. Safety, Environmental, Production, Maintenance and Quality) for determining the criticality of each piece of equipment, differentiating their criticality on a multi-digit numeric basis. The CRT provides granularity that lets you identify clear breakpoints in criticality, enabling you to direct resources where they provide the greatest benefit.

Some questions to think about when considering enterprise reliability...

- Is your Master Equipment List accurate?
- Do you use consistent naming conventionsfrom one plant to another?
- Does your inventory catalog include the parts required to maintain your equipment (and only the parts necessary to maintain your equipment)?
- How do the costs associated with the PM/PdM technology compare to the cost of a failure?
- How would you take the optimal strategy for a given asset and apply it to similar assets?

How would you continuously improve your reliability program based on the results it delivers?